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Attorney Docket No. 026014-004500US Client Ref. No. REG00035 1999 PT

TOWNSEND and TOWNSEND and CREW LLP

By: A A A A

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Jeffrey P. Bezos

Application No.: 09/437,815

Filed: November 10, 1999

For: METHOD AND SYSTEM FOR ALLOCATING DISPLAY SPACE

Confirmation No. 8505

Examiner: Jeffrey D. CARLSON

Technology Center/Art Unit: 3622

APPELLANTS' REPLY BRIEF UNDER

37 CFR §41.41

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

#### Commissioner:

This Reply Brief is responsive to the Examiners' Answer issued on September 15, 2009, and supplements the arguments made in Appellants' Appeal Brief filed May 20, 2009. Because the Examiner's Answer merely copies the language for each rejection from the Final Office Action mailed December 30, 2009, the Examiner's Answer does not raise any new issues with respect to the rejected claims. This Reply Brief accordingly only presents additional arguments relating to the outstanding rejections. A request for an oral hearing pursuant to 37 C.F.R. §1.194 will not be submitted.

## 1. STATUS OF CLAIMS

Claims 1-5, 7-9, 31-36, 41-55, and 75-105 are currently pending in the application and are the subject of this appeal. Claims 6, 10-30, 37-40, 56-74, and 106 were previously canceled.

## 2. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-5, 45-50, 55, 75-81, 87-89, 91-99, 101, 102, and 104-105 are rejected under 35 U.S.C. §102(e) as allegedly being anticipated by *Roth* (U.S. Patent No. 6,285,987), or in the alternative under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*. Claims 7, 8, 31-35, 41-43, 51, 52, and 82-86 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over *Roth* in view of *Copple* (U.S. Patent No. 6,178,408). Claims 9 and 53 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth* and *Copple* in view of *Goldhaber* (U.S. Patent No. 5,794,210). Claims 44, 90, and 100 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth* and *Copple* in further view of *Bates* (U.S. Patent No. 6,339,438). Claim 36 is rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth* and *Copple* in view of *Tulskie* (U.S. Patent No. 6,249,768). Claim 54 is rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth* and *Copple* in view of *Eldering* (U.S. Patent No. 6,324,519).

Claims 1-5, 45-50, 55, 75-81, 87-89, 91-99, and 101-105 are alternatively rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth* in view of *Davis* (U.S. Patent No. 6,269,361). Claims 7, 8, 31-35, 41-43, 51, 52, and 82-86 are alternatively rejected under 35 U.S.C. §103(a) as unpatentable over *Roth* and *Davis* in further view of *Copple*. Claims 9 and 53 are alternatively rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*, *Davis*, and *Copple* in view of *Goldhaber*. Claims 44, 90, and 100 are alternatively rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*, *Davis*, and *Copple* in view of *Bates*. Claim 36 is alternatively rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*, *Davis*, and *Copple* in view of *Tulskie*. Claim 54 is alternatively rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*, *Davis*, and *Copple* in view of *Tulskie*. Claim 54 is alternatively rejected under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*, *Davis*, and *Copple* in view of *Eldering*.

Appellants will treat the cited references as prior art for purposes of this appeal, but reserve the right to disqualify any of the references as prior art in the future.

By declining to separately argue in favor of some of the dependent claims, Appellants do not imply an agreement with, and do not acquiesce in, the Examiner's positions with respect to theses claims. Appellants submit that these dependent claims at least stand with the claims from

which they depend, but also may include elements that cause these dependent claims to be patentable in their own right.

#### 3. ARGUMENT

I. Independent Claims 1-5, 45-50, 55, 75-81, 87-89, 91-99, 101, 102, and 104-105

Are Not Anticipated or Rendered Obvious by *Roth* 

Claims 1-5, 45-50, 55, 75-81, 87-89, 91-99, and 101, 102, and 104-105 stand rejected under 35 U.S.C. §102 as allegedly being anticipated by *Roth*, or alternatively under 35 U.S.C. §103(a) as allegedly being obvious over *Roth*. Appellants respectfully disagree.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, with regard to rejections under 35 U.S.C. § 103, the Office Action must provide evidence which as a whole shows that the legal determination sought to be proved (i.e., the reference teachings establish a prima facie case of obviousness) is more probable than not. M.P.E.P. §2142. Accordingly, "the key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious." M.P.E.P. § 2142; see KSR International Co. v. Teleflex, Inc., 550 U.S.398, 82 USPQ 2d 1385, 1395-97 (2007).

Appellants respectfully submit that *Roth* does not disclose, teach, or suggest all elements of the pending claims.

#### Independent Claim 1

Claim 1 reads as follows:

A method in a computer system for allocating display space on web page instances, the method comprising:

receiving multiple bids each indicating a bid amount, an advertisement, and a requested number of web page instances on which the advertisement is to be placed during a time period;

receiving a request to provide a web page instance to a user, the web page instance including a display space slot for displaying a single advertisement;

selecting, based at least in part on review of bid amounts and on a likelihood that the advertisement will be placed on the requested number of web page instances during

the time period, a received bid whose bid amount is not the highest of the bids whose advertisement is eligible to be placed in the display space slot of the web page instance; adding the advertisement of the selected bid to the display space slot of the web page instance; and

charging the source of the selected bid the amount indicated by the selected bid. The basic disclosure of *Roth* is discussed of record and will not be repeated herein. Arguments relating to differences between *Roth* and Appellants' claims that are of record also will not be repeated herein. These arguments are merely intended to supplement those previously submitted.

Appellants respectfully submit that the discussion of *Roth* in the Office Action mailed December 30, 2008, ("OA") and the Examiner's Answer ("EA") does not accurately characterize the cited portions of the reference with respect to the language of Appellants' claims. For example, the Examiner's Answer cites lines 32-40 of column 8 of *Roth*, where *Roth* discloses a "minimize bid" option (EA pp. 3-4). If a "media buyer" in *Roth* sets the "minimize bid" option to "on," the "system will try to bid the minimum amount necessary to maintain the level of buying that will ensure the desired number of impressions during the time allotted to the media buy" (col. 8, lines 32-37). The "bid amount" then "will be increased as need[ed] to maintain the desired level of buying; however, it will never be increased beyond the maximum bid" (col. 8, lines 37-40). Thus, a "minimize bid" option allows a bid to be submitted for an impression that is less than the maximum bid specified by the "media buyer". As will be discussed in detail below, however, *Roth* does not enable an ad to be selected if that ad is unable to have the highest bid amount.

In one example, if, in *Roth*, a first bid for the media buyer is submitted for \$0.10 and the next highest bid from a competing buyer is \$0.05, then the first bid could have been submitted for \$0.06-\$0.09 and still have been the highest (winning) bid. This reduction could have saved the media buyer money that was not necessary to have the highest bid, and can help the media buyer to spend the "minimum amount necessary" (col. 8, lines 34-37). If the maximum first bid amount is \$0.05, and the highest bid from another bidding agent is \$0.06, the bid amount could not be increased beyond the maximum bid amount, and the bid for the media buyer could not be a highest winning bid, regardless of a "level of buying" (col. 8, lines 37-40).

The Examiner's Answer states that *Roth* discloses "adjusting the bid amount downward to assist in avoiding the overachieving ad, tending to result in other ads being chosen" (EA p. 4). Even assuming such interpretation for sake of argument, however, the system would <u>at best</u> reduce a bid amount to be submitted to the selection logic when a specified "level of buying" is being exceeded, and would <u>at best</u> increase the bid amount, <u>up to the maximum bid amount</u>, when below the specified "level of buying" (col. 8, line 36). In such a case, the bid would be more or less likely to be a highest bid, but still would only be selected by the "selection logic" of *Roth* when being the "highest bid" (col. 2, lines 58-60).

The Examiner's Answer states on page 4 that "the system-controlled changes to the advertiser's proposed bids are considered to be functionally equivalent to the Appellant's selection procedure based on bid and likelihood that an ad's specified number of impressions will be met." Appellants respectfully disagree.

Appellants' claim 1 recites "selecting, based at least in part on review of bid amounts and on a likelihood that the advertisement will be placed on the requested number of web page instances during the time period, a received bid whose bid amount is not the highest of the bids whose advertisement is eligible to be placed in the display space slot of the web page instance". As mentioned of record, *Roth* always selects the highest bid, and for at least this reason cannot anticipate claim 1.

Further, it is respectfully submitted that the teaching of Roth is <u>not</u> "functionally equivalent" to the subject matter of Appellants' claim 1 as alleged in the Examiner's Answer (EA p. 4). For example, Roth cannot adjust a bid amount above the maximum bid amount as discussed above. If a first maximum bid for a first media buyer is less than a second maximum bid for a competing media buyer, the first media buyer cannot have the highest bid as long as the competing media buyer is bidding, such that the first media buyer in Roth will never be selected. Roth at best changes the bid amounts based upon a specified "level of buying," but the selection process in Roth will still always select the highest bid. Roth does not enable an ad to be selected if that ad is unable to have the highest bid. The teaching of Roth is, for at least these reasons, not "functionally equivalent" to "selecting, based at least in part on review of bid amounts and on a

likelihood that the advertisement will be placed on the requested number of web page instances during the time period, a received bid whose bid amount is not the highest of the bids whose advertisement is eligible to be placed in the display space slot of the web page instance" as recited in Appellants' claim 1.

The Examiner's Answer on page 4 also states that *Roth* discloses a case where "an underachieving ad is influenced enough by the optimization process so as to be selected over a higher, competing proposed bid, the ad process can be said to have selected an ad associated with an advertiser-submitted bid that is not the highest". Appellants respectfully disagree with this statement in a number of different aspects. For example, *Roth* always selects the highest bid, such that *Roth* would never select a bid "over a higher, competing proposed bid" as alleged in the Examiner's Answer. Further, *Roth* discloses controlling a bid amount under a maximum bid amount, such that a competing bid above that maximum bid amount will always be selected in the process of *Roth*, and the ad with the lower bid amount would never be selected. *Roth* can at best manipulate the bid amount for an ad below the maximum price, which can help to save a buyer money and arguably prevent the ad from overachieving, but *Roth* does not disclose or suggest any flexibility in the selection process that would allow an ad with a lower bid to be selected over a higher bid for a competing ad for any reason at any time. *Roth* would never select an ad with a maximum bid amount.

For at least these reasons, in addition to the reasons of record, it is respectfully submitted that the process of Roth is <u>not</u> "functionally the same as selecting a lower bid for an underachieving ad" as set forth on EA p. 5.

The Examiner's Answer also states on page 5 that, in light of Vickrey Auctions, it "would have been obvious" to "have taken the winning bid and charge the associated advertiser a price of a lower bid". Even in such a situation, however, the winner is still the bidder with the highest bid, and the amount that the bidder actually pays does not change the fact that the winner in *Roth* still has the highest bid amount, such that the proposed combination still would not render the claim obvious.

For at least these reasons, it is respectfully submitted that *Roth* does not teach or suggest each element of Appellants' claim 1, such that claim 1 cannot be anticipated or rendered obvious by *Roth*. It is therefore respectfully requested that the rejections be reversed.

#### Independent Claims 45, 75, 91, 101, and 102

These claims are not anticipated or rendered obvious by Roth for reasons including those already set forth of record. Further, each of these claims recite subject matter that is not disclosed, taught, or suggested by Roth for reasons including at least some of those set forth above with respect to Appellants' claim 1. For example, Appellants' claim 45 recites "a component that selects a bid based on bid amount and display page eligibility stored in the database, wherein the selected bid does not have the highest bid amount of those bids whose advertisement is eligible to be displayed in the advertising space slot of the display page instance to maximize overall revenue received from placement of advertisements". Appellants' claim 75 recites "selecting an identified advertising plan whose advertisement is to be displayed on the display space slot of the web page instance and whose bid amount is not the highest bid amount of the identified advertising plans and charging the source of the selected advertising plan the bid amount associated with the selected advertising plan". Appellants' claim 91 recites "selecting an identified advertising plan...whose bid amount is not the highest bid amount of the identified advertising plans". Appellants' claim 101 recites "for each eligible advertising plan, determining a likelihood that its advertisement will be placed on the requested number of web page instances based on the placed number and the time remaining in its time period" and "selecting an eligible advertising plan whose determined likelihood is less than the likelihood of another advertising plan and whose amount is lower than the amount of the other advertising plan". Appellants' claim 102 recites "generating normalized bid amounts for the provided bids whose advertisements are eligible to be placed on the web page instance wherein placing the advertisement of the bid with the highest normalized bid amount in the display space slot of the web page instance is anticipated to maximize revenue" and "placing the advertisement of the bid with the highest normalized bid amount in the display space slot of the web page instance wherein the bid with the highest normalized bid is not the bid with the highest bid amount". As

discussed above, such subject matter is not disclosed, taught, or suggested by *Roth*. Further, the process of *Roth* is not "functionally equivalent" to Appellants' claimed subject matter, as alleged in the Examiner's Answer, for reasons including those set forth above.

For at least these reasons, the rejections of independent claims 1, 45, 75, 91, 101, and 102 are improper and should be reversed.

## Dependent Claims 2-5, 46-50, 55, 76-81, 87-89, 92-99, 104, and 105

Claims 2-5, 46-50, 55, 76-81, 87-89, 92-99, 104, and 105 each depend from one of the independent claims discussed above, and thus are allowable for at least the additional reasons set forth above for the respective independent claims. At least some of these claims further recite subject matter that also is not disclosed or suggested by *Roth*, as discussed of record (and not repeated herein) such that at least some of these claims are further patentable in their own right. Appellants therefore respectfully request that the rejections be reversed.

# II. Claims 1-5, 7-9, 31-36, 41-55, and 75-105 Are Not Rendered Obvious by Roth in View of the Cited Art

Each of claims 1-5, 7-9, 31-36, 41-55, and 75-105 are further and/or alternatively rejected as being allegedly rendered obvious by *Roth* in various combinations with *Copple* (U.S. Patent No. 6,178,408), *Goldhaber* (U.S. Patent No. 5,794,210), *Bates* (U.S. Patent No. 6,339,438), *Tulskie* (U.S. Patent No. 6,249,768), *Eldering* (U.S. Patent No. 6,324,519), and/or *Davis* (U.S. Patent No. 6,269,361). Deficiencies in each of these references with respect to these claims, as well as deficiencies in the proposed combinations, are presented of record and will not be repeated herein. It is respectfully submitted that none of these references make up for the further deficiencies in *Roth* with respect to the independent claims that are presented above, such that each of these claims is further allowable for at least these additional reasons. Appellants therefore again respectfully request that the rejections of all claims be reversed.

#### 4. CONCLUSION

If a prima facie case of anticipation or obviousness has not been established, 
"then without more the Appellant is entitled to grant of the patent." In re Oetiker, 977 F.2d 1443, 
1445, 24 U.S. P.Q.2d (BNA) 1443, 1444 (Fed. Cir. 1992). Since a prima facie case of 
anticipation or obviousness has not been presented, it is respectfully submitted that the rejections 
of claims 1-5, 7-9, 31-36, 41-55, and 75-105 are improper, and Appellants request that these 
rejections be reversed.

Respectfully submitted,

Date: 11/ 1 /09

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